

6781032

## Work Order ID 81247

\*81247\*

Page 1

March-12-12 12:45:18 PM

Item ID: D2724-042  
 Revision ID:  
 Item Name: 206L Step Assembly

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Start Date: 12/03/2012 Start Qty: 2.00  
 Required Date: 26/03/2012 Req'd Qty: 2.00

\*2\*

Cust Item ID:

Customer:

\*2\*

Reference:

Approvals: Process Plan: MCS Date: 12/03/12 Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2724

Rev C

100

0.00

\*100\*

Large Fab

Large Fab

Memo

0.00

Large Fab

Cut D2724-2 using D2622 extrusion as per Dwg D2724  
 Deburr and bevel ends for welding

(x2)

Ø

12.04.23

110

0.00

\*110\*

Large Fab

Large Fab

Memo

0.00

Large Fab

Weld end cap (One End Only) and lugs as per Dwg D2724 using Jig DT8898  
 followed by Jig

A/R AL ROD Batch: 1119785  
1120854

Grind end cap welds flush

2

0

12.04.24

12.04.25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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```
Setup  Start  *NS1*
      Stop  *NS2*
```

**Cust Item ID:**  
**Customer:**

Run	Start	*NR1*
	Stop	*NR2*

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Work Order ID 81247

**\*81247\***

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March-12-12 12:45:18 PM

Item ID: D2724-042  
Revision ID:  
Item Name: 206L Step Assembly

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Stop **\*NS2\***

Start Date: 12/03/2012 Start Qty: 2.00 **\*2\***  
Required Date: 26/03/2012 Req'd Qty: 2.00 **\*2\***

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:  
QC: Date: SPC (Y/N): Date:

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC3- Inspect Part Finish	0.00				2	0		12.05.02
<b>*150*</b>									
QC	Memo	0.00							
Quality Control									
160		0.00				2	0		12.05.02
<b>*160*</b>	Large Fab								
Large Fab	Memo	0.00							
Large Fab	Inspect for foreign object per QSI 024								
	Weld Remaining end cap as per Dwg D2724								
	A/R AL ROD Batch: 119785								
	Grind end plate flush.								
170	QC10- Inspect visual per QSI004- ground welds	0.00				2	0		12.05.02
<b>*170*</b>									
QC	Memo	0.00							
Quality Control									

5.26-13

72  
49

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 81247

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**\*81247\***

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Item ID: D2724-042

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: 206L Step Assembly

Start Date: 12/03/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 26/03/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00

**\*180\***

QC

Memo

0.00

*5/26/12*

*x2  
RH*

Quality Control

190

Chemical Conversion Coat per QSI005 4.1

0.00

**\*190\***

HandFinish

Memo

0.00

Hand Finishing

*2X  
RH*

*12/05/12  
mk*

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*200\***

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

*4:00  
3200F  
4:30*

*2X  
RH*

*12/05/12  
mk*

*M121134*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Work Order ID 81247**

March-12-12 12:45:18 PM

**\*81247\***

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Item ID: D2724-042

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: 206L Step Assembly

Start Date: 12/03/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 26/03/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

210

QC3- Inspect Part Finish

0.00

**\*210\***

QC

Memo

0.00

Quality Control

x2 d M 12/03/12

220

Wing Walk as per dwg QSI005 4.4 Batch 1112112000

0.00

**\*220\***

HandFinish

Memo

Hand Finishing

x2 d M 12/03/12

230

QC3- Inspect Part Finish

0.00

**\*230\***

QC

Memo

0.00

Quality Control

12/03/12 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

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**\*81247\***

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Item ID: D2724-042

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: 206L Step Assembly

Start Date: 12/03/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 26/03/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

240

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00

**\*240\***

Packaging

Memo

*PPP 8/225*

0.00

Packaging



*12-59*

250

QC21- Final Inspection - Work Order Release

0.00

**\*250\***

QC

Memo

0.00

Quality Control

*12/5/9*

*MCJ 12/05/09*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

March-12-12 12:45:21 PM

Page 1

Work Order ID: 81247

\*81247\*

Parent Item: D2724-042

\*D2724-042\*

Parent Item Name: 206L Step Assembly

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:E As Per Ecn 766 06-01-06 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2734

Manufactured

No

110

Each

109.0000

1

2

\*D2734\*

Step End Plate

\*\*

12.04.23

Location

Loc Qty

Loc Code

WA

109

76985

49

80682

60

2

D3458-1

Manufactured

No

110

Each

11.0000

2

4

\*D3458-1\*

Step Mounting Plate

\*\*

12.04.23

Location

Loc Qty

Loc Code

WA002

10

75609

10

WA018

1

63075

1

3

D3458-3

Manufactured

No

110

Each

21.0000

2

4

\*D3458-3\*

Step Mounting Plate

\*\*

12.04.23

Location

Loc Qty

Loc Code

WA002

21

75610

21

4

D2734

Manufactured

No

160

Each

109.0000

1

2

\*D2734\*

Step End Plate

\*\*

12.05.02

Location

Loc Qty

Loc Code

WA

109

76985

49

80682

60

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 2

March-12-12 12:45:22 PM

Work Order ID: 81247

\*81247\*

Parent Item: D2724-042

\*D2724-042\*

Parent Item Name: 206L Step Assembly

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 2.00

Required Qty: 2.00

D2622-120C

Manufactured No

100

Each

88.7300

1

2

\*D2622-120C\*

Step Extrusion

\*\*

B81507 (x2) Ae 12.04.23

Location

Loc Qty

Loc Code

HALL

16.37

46910

2

64409

6

66970

7.7

68293

0.25

72131

0.42

WA013

72.36

75781

2.4

77612

69.96

March-12-12 12:45:22 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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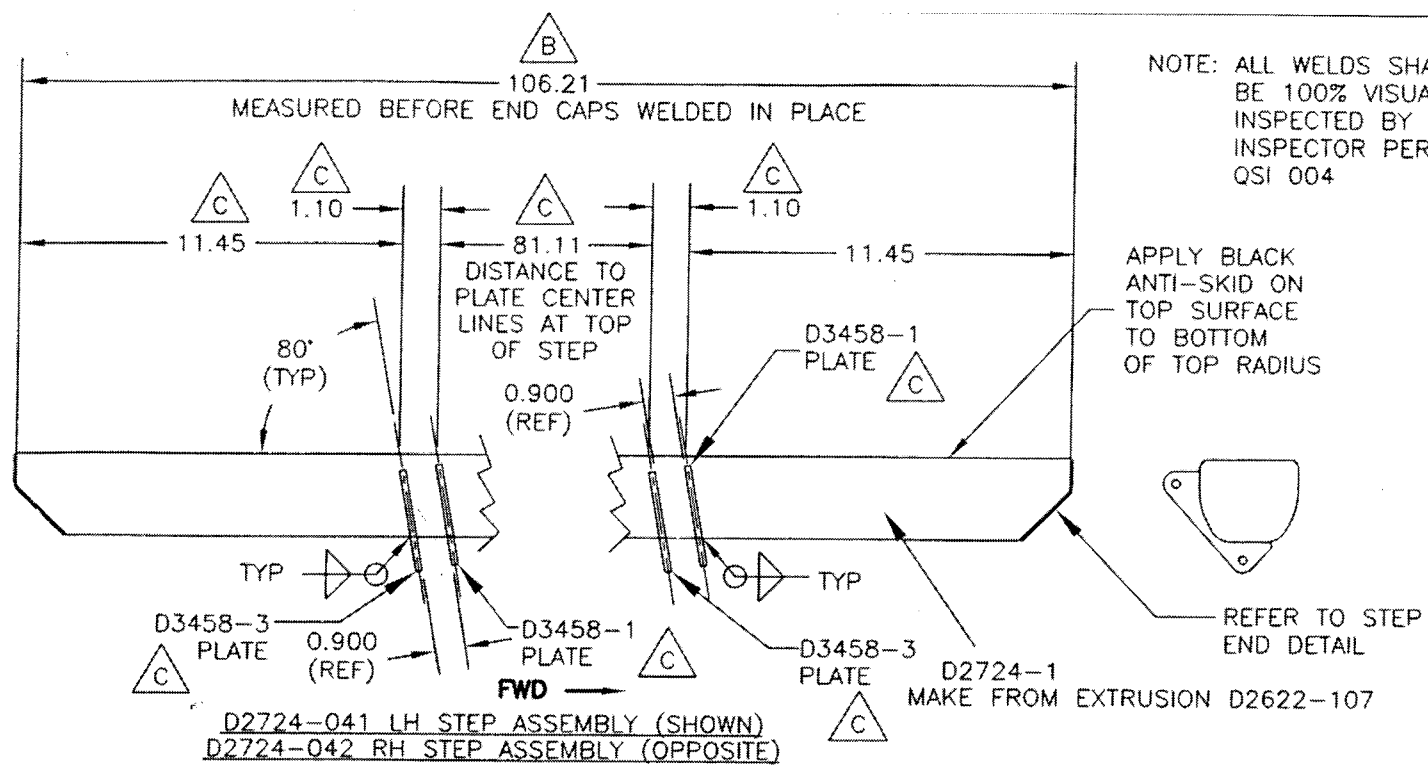
**NOTE:** Date & initial all entries



**DART**

RELEASED  
05.11.14

NOTE: ALL WELDS SHALL  
BE 100% VISUALLY  
INSPECTED BY A QUALIFIED  
INSPECTOR PER DART  
QSI 004



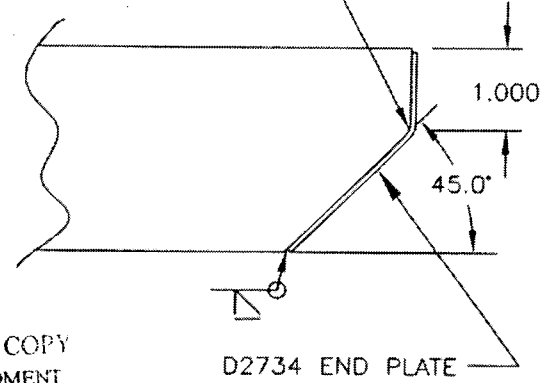
**D2721-041/-042 STEP ASSEMBLY PARTS LIST**

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D2724-041	LH STEP ASSEMBLY
	X	D2724-042	RH STEP ASSEMBLY
1	1	D2622-107	EXTRUSION
2	2	D2734	END PLATE
2	2	D3458-1	PLATE
2	2	D3458-3	PLATE

**D2724-041/-042 STEP ASSEMBLY**

- 1) MAKE FROM EXTRUSION D2622
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ROUND CORNER OF EXTRUSION TO  
MATCH BEND RADIUS OF END PLATE



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

TYPICAL STEP END DETAIL  
NOT TO SCALE

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
KE	PH	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO.
		D2724
DATE	TITLE	REV. C
05.09.19	206L/407 STEP ASSEMBLY	SHEET 1 OF 1
A	97.12.04	SCALE
B	98.10.19	NTS
C	05.09.19	
	RE-DESIGN, ADD D3458-1/-3	

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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